



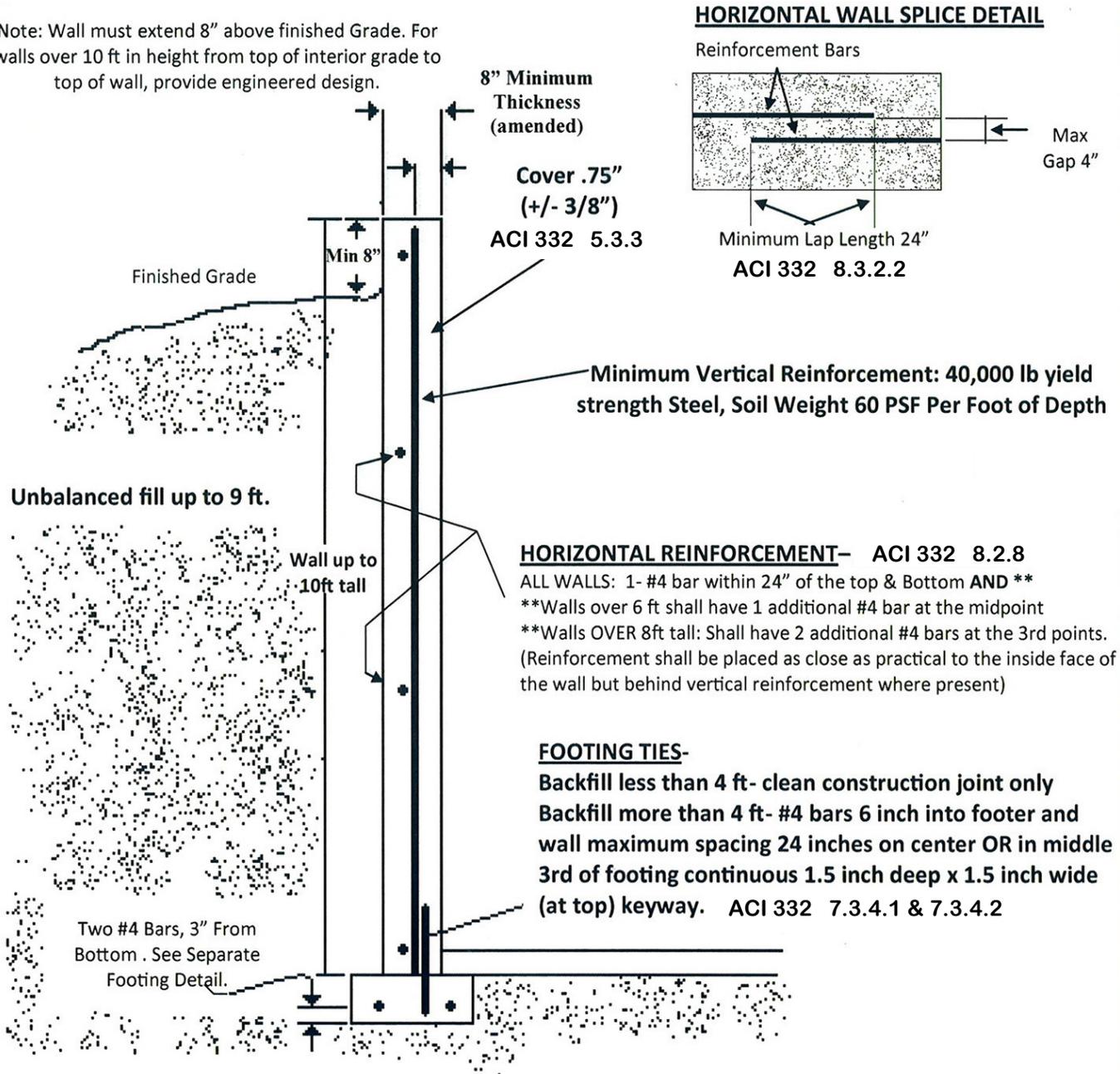
DEPARTMENT OF COMMUNITY DEVELOPMENT

Kristal Deininger - Administrator

HELPFUL BUILDING GUIDELINES

Foundation Wall Reinforcement
Foundation Walls supporting light frame construction

Note: Wall must extend 8" above finished Grade. For walls over 10 ft in height from top of interior grade to top of wall, provide engineered design.



Foundation Walls retaining 4 ft or more of unbalanced load
MUST be laterally supported prior to backfilling!
 IRC Table 404.1.2 (2) through table R404.1.(8), see footnotes

SINGLE FAMILY RESIDENTIAL
Foundation Wall Reinforcement
Foundation Walls supporting light frame construction

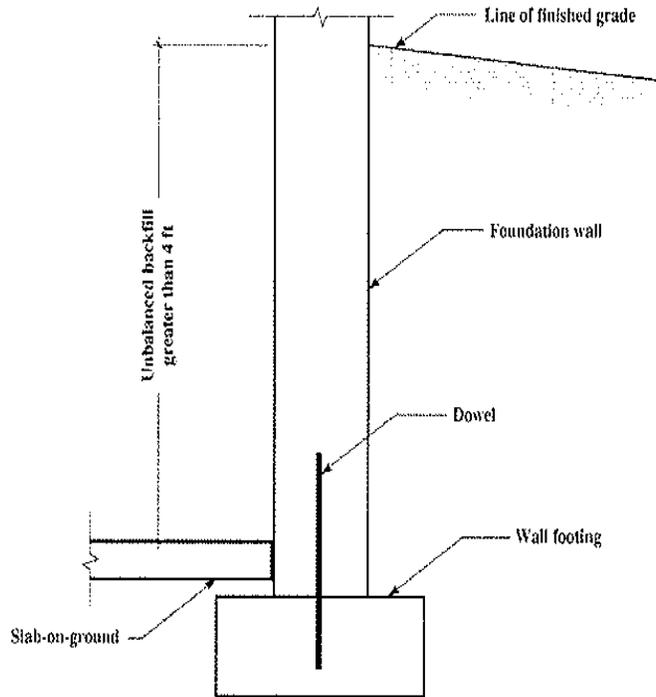


Fig. R7.6—Wall-to-footing joint with dowel.

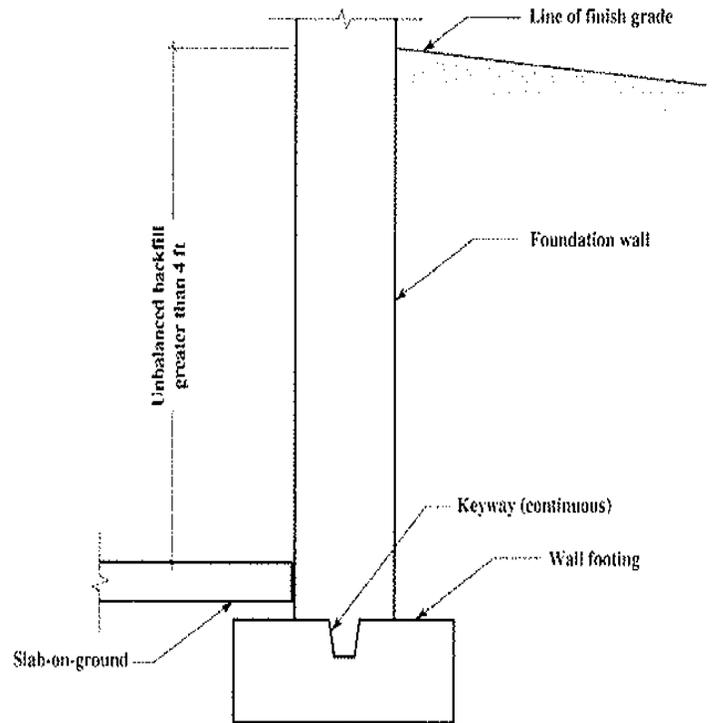


Fig. R7.7—Wall-to-footing joint with keyway.

7.3.2 Formed footings—Side forms shall be secured to maintain dimensions and alignment before and during concrete placement.

7.3.3 Finishing—Top surfaces of the footing shall be struck off level or prepared for keyway or dowel connection as required in Section 7.3.4.

7.3.4 Wall-to-footing joint—All wall-to-footing connections shall be in accordance with Table 7.4.

7.3.4.1 A No. 4 dowel shall extend at least $36d_b$ into the wall and 6 in. into the footing at a maximum of 24 in. on-center along the footing. To facilitate positioning before concrete placement, vertical dowels are permitted to be driven into the grade in the bottom of the footing.

R7.3.4.1 Refer to Fig. R7.6.

7.3.4.2 A continuous keyway shall be formed in the footing located within the middle third of the wall. The

Table 7.4—Required wall-to-footing joint designs

SDC	Height of unbalanced backfill	Acceptable joint
A, B, C	≤ 4 ft	Clean construction joint*
	> 4 ft	7.3.4.1 or 7.3.4.2
D ₀ , D ₁ , D ₂ , E	All	7.3.4.1

*Clean construction joint refers to the interface between footing and foundation wall with no debris and with no tooled surface characteristics; refer to Fig. R7.4.

keyway shall be a specified minimum of 1-1/2 in. deep and 1-1/2 in. wide at the top.

R7.3.4.2 Refer to Fig. R7.7.